MAY 10, 1954

NYC's New Operating Staff Tools . . . p. 19

# RAILWAY AGE

The Standard Railroad WEEKLY for Almost a Century

N THIS ISSUE:

anta Fe's Attack
On "Union Shop"

Who Shall Be
Piggyback'd"?

All-Welded Cons
or the Santa Fe

Questions & Answers
or Transportation Men

ersatile Machine
lds ACL Maintenance

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DOES THE WORK OF FIVE!
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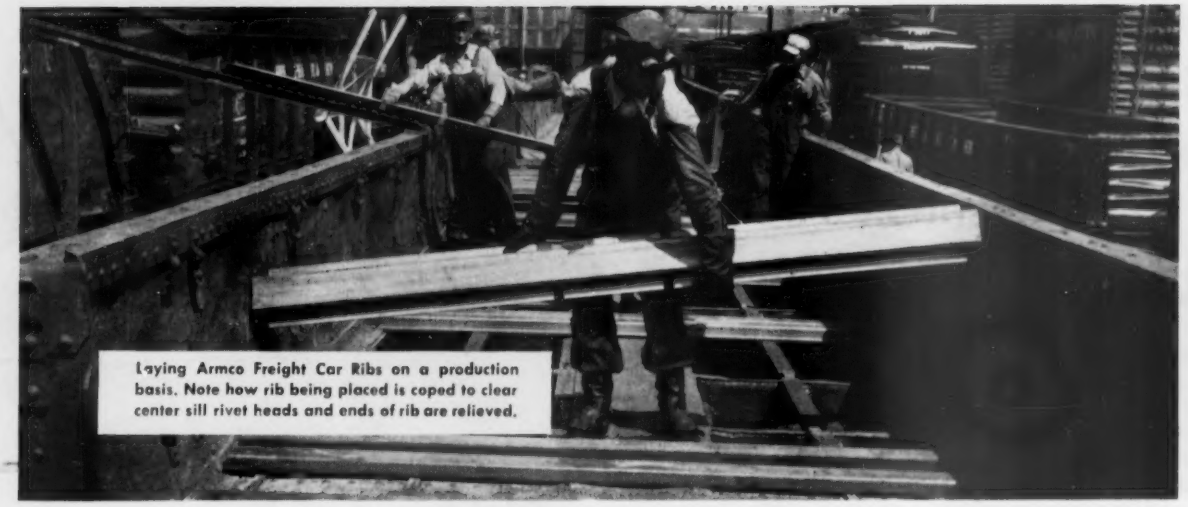

Laying Armco Freight Car Ribs on a production basis. Note how rib being placed is coped to clear center sill rivet heads and ends of rib are relieved.

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# RAILWAY AGE

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Published weekly by the Simmons-Boardman Publishing Corporation at Orange, Conn., and entered as second class matter at Orange, Conn., under the Act of March 3, 1879. Name registered in U. S. Patent Office and Trade Mark Office in Canada. Simmons-Boardman Publishing Corporation: James G. Lyne, president. Samuel O. Dunn, chairman emeritus. J. S. Crane, vice-president and secretary. Harry H. Melville, C. W. Merriken, John R. Thompson, William H. Schmidt, Jr., J. S. Vreeland, Fred W. Smith, Robert G. Lewis, vice-presidents. Arthur J. McGinnis, executive vice-president and treasurer. Ralph E. Westerman, assistant treasurer.

**May 10, 1954** **Vol. 136, No. 19**


## Week at a Glance

**First-quarter net income** of class I railroads was less than half that reported for the corresponding portion of last year. For March alone, however, figures were a little less discouraging, lending credence to reports of a "leveling off" in the traffic slump.

**Up to 1,250 new passenger cars can be ordered** within the next 14 months under recently authorized accelerated amortization arrangements. The added incentive to buy new cars, and plans to "mothball" older ones, reflect sudden government concern over the reduction—which government itself has helped to create—in the railroads' passenger-carrying capacity.

**FORUM: The Santa Fe's attack on the "union shop"** has profound national significance; discussion of this and other union disputes must be kept on a high level to achieve public understanding. 13

**New operating staff tools** are provided by new NYC organization, whereby operating and maintenance organizations were revamped to eliminate dual-level management and increase staff efficiency. 19

**The ACL uses Gradalls** for a wide variety of maintenance jobs, from ditching and bank restoration to laying rail and lining track. 23

**Who should be "piggyback'd"?** Eugene F. Ryan of the Rail-Trailer Company gives the "practical side" of the controversy presently under investigation by the ICC. 25

**All-welded gondolas**—500 of them—have made their appearance on the Santa Fe. The 70-ton cars, built by Pressed Steel, all have drop ends. 27

## Current Statistics

| | |
|---|---|
| Operating revenues, three months | |
| 1954 | $ 2,274,693,935 |
| 1953 | 2,595,625,218 |
| Operating expenses, three months | |
| 1954 | $ 1,843,732,954 |
| 1953 | 1,979,735,431 |
| Taxes, three months | |
| 1954 | $ 223,909,035 |
| 1953 | 310,785,212 |
| Net railway operating income, three months | |
| 1954 | $ 146,620,417 |
| 1953 | 251,444,128 |
| Net income, estimated, three months | |
| 1954 | $ 88,000,000 |
| 1953 | 185,000,000 |
| Average price railroad stocks | |
| May 4, 1954 | 64.90 |
| May 5, 1953 | 65.06 |
| Carloadings, revenue freight | |
| Seventeen weeks, 1954 | $ 10,286,058 |
| Seventeen weeks, 1953 | 11,839,875 |
| Average daily freight car surplus | |
| Week ended May 1, 1954 | 137,282 |
| Week ended May 2, 1953 | 39,594 |
| Average daily freight car shortage | |
| Week ended May 1, 1954 | 482 |
| Week ended May 2, 1953 | 1,831 |
| Freight cars delivered | |
| March 1954 | 4,823 |
| March 1953 | 6,679 |
| Freight cars on order | |
| April 1, 1954 | 20,966 |
| April 1, 1953 | 68,553 |
| Freight cars held for repairs | |
| April 1, 1954 | 102,266 |
| April 1, 1953 | 94,896 |
| Average number of railroad employees | |
| Mid-March 1954 | 1,058,762 |
| Mid March 1953 | 94,896 |

RAILWAY AGE IS A MEMBER OF ASSOCIATED BUSINESS PUBLICATIONS (A.B.P.) AND AUDIT BUREAU OF CIRCULATION (A. B. C.) AND IS INDEXED BY THE INDUSTRIAL ARTS INDEX AND BY THE ENGINEERING INDEX SERVICE. RAILWAY AGE INCORPORATES THE RAILWAY REVIEW, THE RAILROAD GAZETTE, AND THE RAILWAY AGE GAZETTE.

## Departments


| | |
|---|---|
| Competitive Transport | 8 |
| Equipment & Supplies | 10 |
| Figures of the Week | 7 |
| Financial | 9 |
| Forum | 13 |
| Law & Regulation | 8 |
| New Facilities | 9 |
| Operations | 8 |
| Organizations | 9 |
| People in the News | 9 |
| Questions and Answers | 14 |
| Railway Officers | 11 |
| Rates & Fares | 8 |
| Securities | 11 |
| Supply Trade | 10 |


# Week at a Glance CONTINUED

### BRIEFS

**The House on May 6 passed the Senate-approved St. Lawrence seaway bill.** The vote was 241 to 158. The bill, S.2150, provides for United States participation with Canada in construction of the seaway.

**A stainless-steel car** has been developed by the Pullman-Standard Car Manufacturing Company; thus, dependent on individual railroad preferences, stainless steel is now available as an optional material to aluminum and low-alloy steel for Pullman-built cars. The company's first coach to use stainless steel for its entire superstructure has been sold to the Katy (*Railway Age*, April 19).

**A 110-mile coal pipeline** will reportedly be built by Pittsburgh Consolidation Coal Company to carry coal from mines near Cadiz, Ohio, to the Cleveland Electric Illuminating Company. Savings over rail rates are estimated at $1.25 a ton. The coal, crushed to small size, will be mixed with water, as in a short experimental pipeline built by Consolidation several years ago.

**Last year's passenger-service deficit** of Class I railroads appears to have topped 1952's loss of $642 million. And the final figures may also show that it was the record deficit, supplanting 1951's $681 million in that role.

**Federal highway aid to states** on a record basis of $875 million annually for the 1956 and 1957 fiscal years is provided in the highway act which President Eisenhower signed May 6. Currently effective federal-aid authorizations, which run through fiscal 1955, are on an annual basis of $575 million.

**Spontaneous fires** that occur during shipment of cotton will be studied by Stanford Research Institute in a program planned by the Southern Pacific. Field studies will be combined with laboratory tests and investigations in an effort to determine the cause and cure of these not-too-frequent, but very destructive, fires.

Photo shows typical rubber products. All rubber parts are made to exacting specifications right at the Westinghouse Air Brake Company plant so that quality can be closely controlled.

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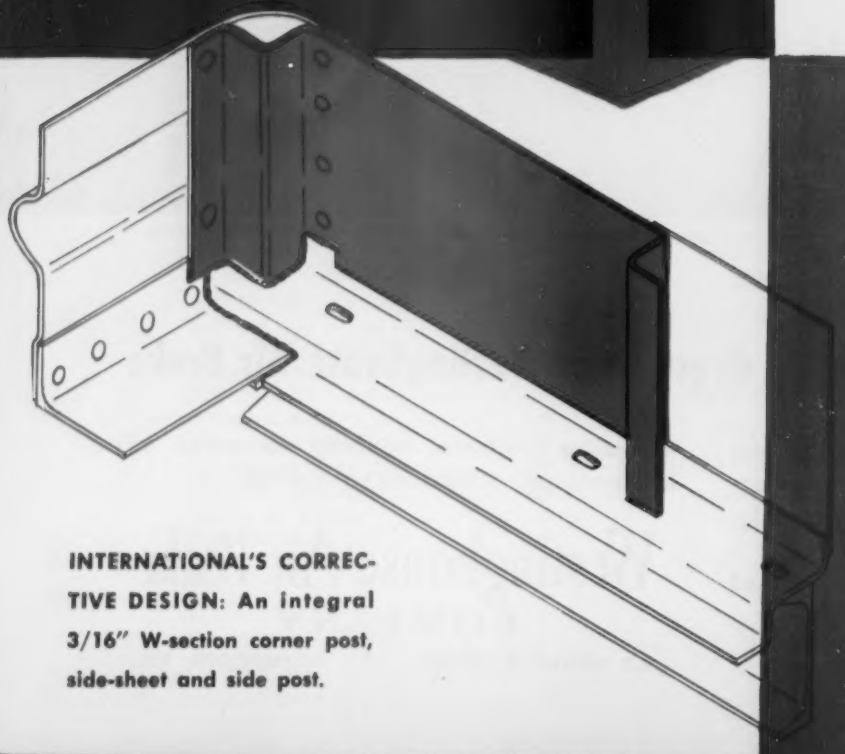


**INTERNATIONAL'S CORRECTIVE DESIGN:** An integral 3/16" W-section corner post, side-sheet and side post.

*International Steel* COMPANY

RAILWAY DIVISION
EVANSVILLE 7, INDIANA

# Three Months' Net Off $97 Million

**Net railway operating income down from $251 million to $147 million—Net drops to $88 million, compared with $185 million in 1953's first quarter**

Class I railroads in the first three months of this year had an estimated net income, after interest and rentals, of $88,000,000, according to the Bureau of Railway Economics of the Association of American Railroads. This compared with a net income of $185,000,000 in the first quarter of 1953.

Net railway operating income, before interest and rentals, was $146,620,417 for the first three months of this year. The comparable figure for the first quarter of 1953 was $251,444,128.

**March Results**—Estimated results for March showed net income of $49,000,000, compared with $72,000,000 in March 1953. Net railway operating income for the 1954 month was $69,628,457, compared with $93,564,311.

In the 12 months ended March 31, the rate of return averaged 3.77%, compared with 4.26% in the 12 months ended March 31, 1953.

CLASS I RAILROADS—UNITED STATES

| | *Month of March* 1954 | 1953 |
|---|---|---|
| Total operating revenues | $802,533,700 | $919,628,854 |
| Total operating expenses | 629,993,270 | 696,928,331 |
| Operating ratio—per cent | 78.50 | 75.78 |
| Taxes | 82,172,416 | 111,008,762 |
| Net railway operating income (Earnings before charges) | 69,628,457 | 93,564,311 |
| Net income, after charges (estimated) | 49,000,000 | 72,000,000 |
| *Three Months Ended March 31* | | |
| Total operating revenues | 2,274,693,935 | 2,595,625,218 |
| Total operating expenses | 1,843,732,954 | 1,979,735,431 |
| Operating ratio—per cent | 81.05 | 76.27 |
| Taxes | 223,909,035 | 310,785,212 |
| Net railway operating income (Earnings before charges) | 146,620,417 | 251,444,128 |
| Net income, after charges (estimated) | 88,000,000 | 185,000,000 |

Gross in the first three months of 1954 amounted to $2,272,693,935, compared with $2,595,625,218 in the same period of 1953, a decrease of 12.4%. Operating expenses amounted to $1,843,732,954 compared with $1,979,735,431, a decrease of 6.9%.

Thirty-eight Class I roads failed to earn interest and rentals in the three months of 1954; 20 were in the Eastern district, four in the Southern region, and 14 in the Western district.

## Freight Car Loadings

Loadings of revenue freight in the week ended May 1 totaled 647,925 cars, the Association of American Railroads announced on May 6. This was an increase of 21,744 cars, or 3.5 per cent, compared with the previous week; a decrease of 133,574 cars, or 17.1 per cent, compared with the corresponding week last year; and a decrease of 96,799 cars, or 13.0 per cent, compared with the equivalent 1952 week.

Loadings of revenue freight for the week ended April 24 totaled 626,181 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS

For the week ended Saturday, April 24

| District | 1954 | 1953 | 1952 |
|---|---|---|---|
| Eastern | 107,814 | 135,408 | 133,231 |
| Allegheny | 115,170 | 159,104 | 163,493 |
| Pocahontas | 44,311 | 55,687 | 59,347 |
| Southern | 116,629 | 133,744 | 135,182 |
| Northwestern | 86,825 | 122,247 | 118,091 |
| Central Western | 102,852 | 113,737 | 112,764 |
| Southwestern | 52,580 | 59,877 | 57,381 |
| Total Western Districts | 242,257 | 295,861 | 288,236 |
| Total All Roads | 626,181 | 779,804 | 779,489 |
| Commodities: | | | |
| Grain and grain products | 42,269 | 42,395 | 40,159 |
| Livestock | 8,069 | 8,817 | 10,571 |
| Coal | 97,123 | 124,974 | 142,258 |
| Coke | 7,537 | 14,310 | 14,985 |
| Forest products | 40,049 | 46,289 | 45,290 |
| Ore | 31,790 | 78,350 | 77,463 |
| Merchandise l.c.l. | 61,890 | 69,654 | 72,334 |
| Miscellaneous | 337,454 | 395,015 | 376,429 |
| April 24 | 626,181 | 779,804 | 779,489 |
| April 17 | 612,884 | 751,628 | 735,069 |
| April 10 | 606,790 | 721,139 | 690,752 |
| April 3 | 599,302 | 704,517 | 706,889 |
| March 27 | 601,426 | 715,333 | 725,487 |
| Cumulative total, 17 weeks | 10,286,058 | 11,839,875 | 12,252,591 |

**In Canada.**—Carloadings for the seven-day period ended April 14 totaled 66,274 cars, compared with 66,003 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

| | Revenue Cars Loaded | Total Cars Rec'd from Connections |
|---|---|---|
| Totals for Canada: | | |
| April 14, 1954 | 66,274 | 29,561 |
| April 14, 1953 | 73,227 | 30,410 |
| Cumulative Totals | | |
| April 14, 1954 | 969,605 | 423,973 |
| April 14, 1953 | 1,052,441 | 468,452 |

**IN THE FALL AND AGAIN IN THE SPRING the Harvard Business School has its "Advanced Management Program," a refresher course for 150 business executives. In recent years railroads have been well represented.**

**Shown here is the current railroad delegation—left to right (seated), E. W. Torian, general superintendent transportation, T&NO; J. P. Allison, assistant general manager, Erie; W. M. Jaekle, assistant chief engineer, SP; H. P. Thinnes, assistant general superintendent, NKP; C. M. Rasmussen, superintendent, GN; G. C. Vaughan, superintendent, PRR; and W. H. Hudson, chief engineer, SLSW; (standing), W. H. Rose, assistant general purchasing agent, SAL; J. A. Papa, general manager, REA; J. B. Dorrance, Jr., general passenger agent, PRR; and G. W. Maxwell, general superintendent, NYC.**

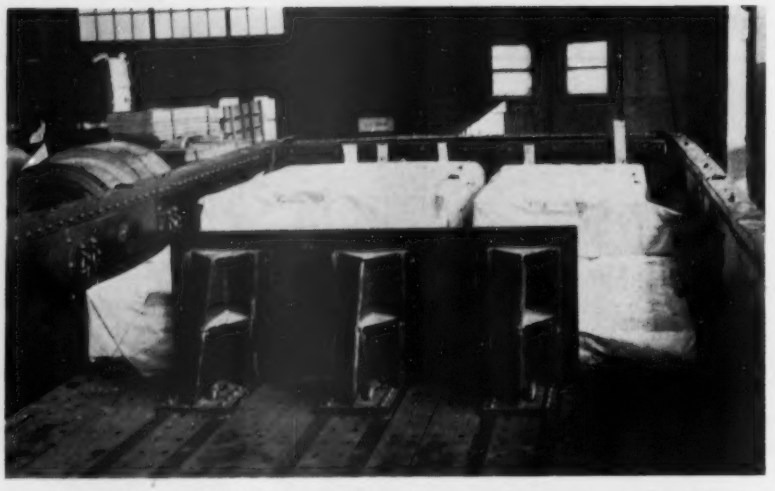
## Operations

### C&NW Extends Piggyback To Duluth and Superior

A further extension of its trailer-on-flat-car service was placed in effect by the Chicago & North Western on April 28, with inauguration of overnight service for LCL-shipments between the Twin Cities—St. Paul and Minneapolis—and the Twin Ports—Duluth, Minn., and Superior, Wis.

As in its other less-carload piggyback services, the C&NW is using its own semi-trailers with shipments loaded in the trailers in delivery route order.

The new service is similar to that already operated between Chicago and Green Bay, Wis., Chicago and the Twin Cities and Chicago and Council Bluffs and Omaha. The service is also in effect between Chicago and Milwaukee. Trailer-load or "quantity" rates, at a level directly competitive with existing common carrier truck service, are in effect between Chicago and Green Bay.



**A MODIFIED GONDOLA CAR equipped with movable partitions is expected substantially to reduce blocking charges for transporting steel by rail, according to the Chesapeake & Ohio. The modification, still in the test car stage, was developed at C&O shops in Grand Rapids, Mich. Lower blocking costs are expected, in turn, to attract more steel traffic now moving by truck. The car is equipped with a cushioned steel platform which floats on H-type beams, which in turn ride on flat steel plates. The load is held between adjustable rubber-faced bulkheads comparable to the moving partitions in a file drawer. The car is suitable for either coil or bundle steel.**

## Competitive Transport

### Seatrain Gets Permanent N.Y.-Savannah Rights

The Interstate Commerce Commission has granted Seatrain Lines permanent operating rights on the New York-Savannah route where it has been operating under temporary authority since November 1951. The rights cover operations as a common carrier by water in transportation of "commodities generally." Seatrain operations involve use of vessels equipped to transport freight cars and other shipments, including objects of unusual size and liquid cargoes in side tanks.

## Rates & Fares

### ICC Gives N.Y. State Time to Raise LI Fares

The Interstate Commerce Commission has decided to withhold its ruling on the Pennsylvania's request for a 25% increase in commutation fares on the Long Island, so as to permit the Public Service Commission of New York to proceed with its own fare investigations.

The commission, in a May 4 report, declared however, that unless the state commission "concludes its proceedings satisfactorily within a reasonable time, complainant may come back to us for the relief it has requested here."

As indicated above, the complainant is PRR, which owns about 94% of LI stock. The complaint, filed last October, alleged that LI's intrastate commutation fares cause unjust discrimination against intrastate commerce (*Railway Age*, December 7, 1953, page 12).

### New Family Fare Plans Announced

Bargain fares for family travel in Pullman and parlor cars, until recently available only for coach travel, have been announced by 15 Eastern, 19 Western and two Canadian railroads. The new Eastern road fares, to be available for round-trips from June 1 to September 30, apply to travel to the southwest, west, Pacific coast and western Canada.

In Western territory, the plan will go into effect May 31, apply to one-way and round-trip tickets, and is applicable to and from Eastern territory for round-trip tickets on the same basis.

### LI Seeks Higher Fares

"As a step in carrying forward his program for rehabilitation of the Long Island," Trustee William Wyer has filed a petition with the New York State Public Service Commission providing for increases averaging 34% in commutation fares and 20% in single fares.

"A total of $8,000,000 in additional revenue per year is required to meet operating expenses and taxes, enable further improvements, provide a small cushion for contingencies and produce some return on investment, to which this, like any other business, is entitled," Mr. Wyer said. "Reports from my staff indicate that at least $100,000,000, including $44,000,000 in passenger car modernization, is urgently needed for improvements during the next 10 or 12 years, and this kind of money cannot be provided without fare increases of the magnitude I am seeking."

He noted that lesser increases would have been required if efforts to improve financial condition of the property by other means had not been blocked.

## Law & Regulation

### ICC Suspends Proceeding On Licensing Fees

The ICC proceeding to develop fees for "licensing" and related activities has been suspended by the commission until July 1, 1955.

Suspension of the proceeding came after the Senate Interstate Commerce Committee adopted a resolution calling for delay.

The Senate committee said the fee proposal raises a "basic question" on the fundamental philosophy of regulation. It said this question should be

resolved by Congress, after full hearings.

The ICC proceeding was initiated as a result of an appropriation bill approved in 1952, and a subsequent directive from the Bureau of the Budget. In February this year the commission made public a proposed schedule of fees, ranging from a low of $75 to a maximum of $5,000 (*Railway Age*, March 1, page 8).

Prior to suspension of the entire proceeding, interested parties had been given until May 15 to file statements on the fees proposed.

## People in the News

### Knudson to Join Eisen In Law Partnership

Interstate Commerce Commissioner James K. Knudson, who is also administrator of the Defense Transport Administration, "is completing arrangements to enter into a partnership for the practice of law before federal and state regulatory bodies with S. S. Eisen of New York, a prominent ICC practitioner."

This has been announced by Mr. Knudson who also said that the firm will maintain offices in New York and Washington. The formal opening of the Washington office, which Mr. Knudson will occupy, "will be announced shortly, partly depending on the installation" of his successor on the commission.

In his March 10 letter advising President Eisenhower of his intention to leave government service, Mr. Knudson said he was willing to stay on the commission until his successor takes over, "assuming this can be done fairly soon." (*Railway Age*, March 22, page 14.)

### "IKE" TIGRETT, BUILDER OF THE GM&O, DIES AT 74

**Isaac Burton Tigrett, who served as a railroad president longer than any other man in America and who forged the 3,000-mile Gulf, Mobile & Ohio from a bankrupt 49-mile "streak of rust," died unexpectedly at his home in Jackson, Tenn., on May 2.**

**Mr. Tigrett was serving as corporate chairman of the GM&O at the time of his death having reliquished the duties of president to his long time "chief assistant", Frank M. Hicks, late in 1952—40 years after he had assumed the presidency of the predecessor Birmingham & North Western "unwillingly." He was "temporarily" elected president of the Gulf, Mobile & Northern in 1919 and these properties later formed the base elements to which was ultimately added the far larger Mobile & Ohio and Alton roads to form the present GM&O system.**

## New Facilities

### Sacramento Northern Opens $1-Million Trestle

A diesel-powered freight train crossed the Sacramento Northern's Arcade trestle late in the afternoon of April 6 to restore direct service to California's Vacaville-Suisun area. The service had been disrupted since July 1951, when a two-mile trestle, built by the predecessor Oakland, Antioch & Eastern in 1912, collapsed. Rebuilding the structure has cost the SN over $1 million, and involved construction of alternate trestles and rock fills over the wide, marshy area known as Yolo Bypass.

Service to the Vacaville-Suisun area was maintained by the SN by a detour through Stockton and Pittsburg. Reopening of the trestle, however, will permit the road to reduce transit time to that in effect prior to loss of the original trestle.

## Organizations

### Financial Analysts to Tour Rail Properties

Considerable study will be devoted to railroads and allied industries by the National Federation of Financial Analysts Societies, when it meets in the Palmer House, Chicago, May 17-20. Investment specialists of major banks, insurance companies, investment trusts, pension funds and security firms will attend the meeting.

A flat car tour of the Milwaukee's classification yard at Galewood (near Chicago), the new retarder classification yard at Bensenville, Ill., and the North Western's Proviso yard, will be a part of the convention's field trip program. The same group will visit the plant of the Griffin Wheel Company for luncheon and inspection of the company's new process of casting steel car wheels. E. Q. Sylvester, president of Griffin Wheel, and Charles C. Jarchow, president of its parent, American Steel Foundries, will speak to the analysts; as will L. F. Donald, vice-president—operation, of the Milwaukee, J. J. O'Toole, general manager, G. F. Wilson, superintendent, and C. A. Nummerdor, general superintendent transportation.

Another group of analysts, as guests of the Rock Island, will travel by special train to Peoria, Ill., for a visit to the Caterpillar Tractor Company's proving ground for earth moving machines and a talk with top officers of that company. A number of Rock Island officers will accompany the group, which is expected to number more than 200.

Lester N. Selig, chairman of the board of General American Transportation Corporation, will, along with several of his officers, take part in one of the "management conferences" scheduled on the convention program.

A basic materials exposition will be held at the International Amphitheatre, Chicago, May 17-20, with exhibits emphasizing practical applications of new and conventional types of materials. Among topics to be discussed are "New Metal Forming Processes," "How to Set Up a Materials Department," "How, When and Where to Use Non-Metallic Materials," "Bonding of Metals and Plastics," and "Corrosion."

## Financial

### ICC to Hear Argument On Plea in NYC Fight

The Interstate Commerce Commission will hear oral argument May 14 on the New York Central's petition for a declaratory order with respect to issues raised by Robert R. Young's undertaking to gain control of that road.

The petition asks for a declaratory order finding, among other things, that Alleghany Corporation, Mr. Young and Allan P. Kirby will acquire control of Central if a majority or more of the Central's board of directors should be composed of Messrs. Young and Kirby and others selected by them or Alleghany; and that since Central controls at least two other roads—Pittsburgh & Lake Erie and Indiana Harbor Belt—there will be an acquisition of control of two or more carriers, which, by terms of the Interstate Commerce Act's Section 5, may not be lawfully done without approval and authorization of the commission.

**Wheeler View**—The interpretation of section 5 on which Central's petition was based has been challenged by Alleghany's counsel—former Senator Burton K. Wheeler, who was chairman of the Senate Committee on Interstate and Foreign Commerce when the Transportation Act of 1940 was passed to give Section 5 its present form. Central's general counsel, Harold H. McLean, has countered with a letter to the commission, which embodies a presentation in support of contentions that the Wheeler view was inaccurate while the Central position "is supported by decisions of the commission."

The oral argument will be held before the entire commission in Wash-

ington. It will cover a supplemental Central petition as well as that road's plea for the findings noted above. Also involved will be a supporting petition filed by Harold S. Vanderbilt, Central board member and stockholder.

**Central's supplemental petition** requests that the proposed declaratory order also include findings to the effect that: (1) Clinton W. Murchison, Sid W. Richardson and Cyrus S. Eaton are participating with Alleghany and Messrs. Young and Kirby in effectuating control or management of carriers in the NYC system in a common interest; and (2) Alleghany and Messrs. Young, Kirby, Murchison, Richardson and Eaton, and the Chesapeake & Ohio, are participating in effectuating management of the Central system and the C&O in a common interest.

An earlier Central petition for an investigation into recent activities and stock transactions of Mr. Young and C&O and Alleghany was denied by the commission. That denial order stipulated that nothing in it "shall be interpreted or construed as a determination by this commission of the propriety or legality of any acquisition or exercise by any person or persons of control of the New York Central . . . or of the propriety or legality of any interlocking directorates insofar as it relates to the New York Central System" (*Railway Age*, April 12, page 10).

**800,000 NYC Shares**—Meanwhile, William White, NYC president, said the road, on advice of outside counsel, has not transferred on its books the 800,000 shares of NYC common stock "purportedly bought" by Messrs. Murchison and Richardson from the C&O. "Examination of papers submitted in support of the request for transfer," Mr. White added, "disclosed that certain certificates, on the basis of which these shares had been released from the trust agreement under which they had been held for account of C&O, failed to conform with expressed requirements of the trust agreement."

The 800,000 NYC shares acquired by C&O had been deposited with the Chase National Bank, as trustee, under an ICC order of June 5, 1945. A requirement of the trust agreement stipulated that the shares were not to be transferred to any person "affiliated" with Alleghany.

"Counsel for Messrs. Murchison and Richardson were fully advised of the opinion of outside counsel," Mr. White said, "and plenty of opportunity was given to remedy the defect in the papers that were submitted, but for some reason the defect was not, and has not been, cured. Instead, Messrs. Murchison and Richardson have sued in the Supreme Court of the State of New York asking that the court order NYC to make transfer of the 800,000 shares. NYC is pleased to have a judicial determination of the matter."

## Equipment & Supplies

# Fast Write-Offs for Passenger Cars

**ODM extends accelerated amortization program to 1,250 new sleepers, coaches, chair cars, diners and other units**

Accelerated amortization arrangements have been extended to railroad passenger cars.

Acting favorably on recommendations of the Defense Transport Administration, the Office of Defense Mobilization has set an interim expansion goal for 1,250 cars, which may be sleepers, coaches, chair cars, diners, and self-propelled units. Setting of the goal extends accelerated amortization arrangements to such cars if work on them is begun before July 1, 1955.

**Head-End Cars Already In**—The goal does not cover baggage, express, mail, or other head-end cars. These remain in the freight-car goal.

The ODM announcement said the number of passenger cars owned by Class I railroads and the Pullman Company decreased from 29,000 to 22,300 during the 1944-1954 decade. Seating capacity of the fleet dropped nearly 25%—from 1,700,000 to 1,300,000.

**Would "Mothball" Cars**—"ODM," the announcement added, "is now working with interested government agencies to develop a program which will assure that cars suitable for military and essential civilian traffic in an all-out emergency will not be scrapped as a result of purchase of new passenger-carrying equipment."

As to the latter, Administrator James K. Knudson of DTA has been advocating a plan whereby railroads would modernize their passenger service by acquiring new cars to replace old cars, which would then be "mothballed" and held for service in case of national emergency (*Railway Age*, January 18, page 27).

A fleet of approximately 650 heavyweight sleeping cars may be among the first to go into storage under arrangements now being worked out between the Pullman Company and government officials. About 75 of the cars are railroad owned, and the remainder are

**SAM LAUD (left), who has been elected vice-chairman of the board of General American Transportation Corporation. He has been succeeded as president by WILLIAM J. STEBLER (center), formerly executive vice-president. HERMAN ALTSCHUL (right), assistant to president, sales and production, has been elected vice-president, freight car sales. Other new officers include JAMES S. FREY, vice-president, manufacturing, formerly general manager, manufacturing, and SPENCER D. MOSELEY, assistant to president.**

Pullman owned. The sleepers would join a group of tourist cars already in government storage.

### LOCOMOTIVES

The **Western Maryland** has ordered six diesel road-switching units at an approximate cost of $1,031,000. The Electro-Motive Division of General Motors Corporation will construct four 1,750-hp units (scheduled for delivery this month); and the American Locomotive Company, two 1,600-hp units, one to be equipped with a steam generator (scheduled for delivery next August).

## Securities

### Security Price Averages

| | May 4 | Prev. Week | Last Year |
|---|---|---|---|
| Average price of 20 representative railway stocks | 64.90 | 61.69 | 65.06 |
| Average price of 20 representative railway bonds | 95.21 | 94.31 | 91.47 |

### Authorizations

**CHICAGO & NORTH WESTERN.**—To assume liability for $4,695,000 of equipment trust certificates to finance in part 28 diesel units and 25 caboose cars costing an estimated $5,879,508 (*Railway Age*, March 29, page 31). Division 4 approved sale of the certificates, with a 2⅞% interest rate, for 99.509—the bid of Halsey, Stuart & Co. and 9 associates—making the anual cost of proceeds to the road approximately 2.97%. The certificates, dated May 1, will mature in 15 annual installments of $313,000 each, beginning May 1, 1955. They were reoffered to the public at prices yielding 1.65 to 3%, according to maturity.

**INTERNATIONAL-GREAT NORTHERN.**—To assume liability for $1,845,000 of series FF equipment trust certificates to finance in part 9 diesel units and 125 freight cars costing an estimated $2,315,447 (*Railway Age*, April 12, page 34.) Division 4 approved sale of the certificates at 99.258, with a 2⅞% interest rate—the bid of Blair, Rollins & Co. for itself and Baxter, Williams & Co. This would make the annual cost of proceeds to the road approximately 3.01%. The certificates, dated May 1, will mature in 15 annual installments of $123,000 each, beginning May 1, 1955. They were reoffered to the public at prices yielding from 1.8 to 3.05%, according to maturity.

### Dividends Declared

**NASHVILLE, CHATTANOOGA & ST. LOUIS.**—$1, quarterly, payable June 1 to holders of record May 11.

**READING.**—4% non-cumulative 1st preferred, 50¢, quarterly, payable June 10 to holders of record May 20.

**SOUTHERN.**—62½¢, quarterly, payable June 15 to holders of record May 14.

## Briefly . . .

. . . **Probably the first three-dimensional** cover to appear on a railroad magazine is that on the April 1954 issue of the Maine Central Railroad Magazine. Three-D glasses with which to view the cover are inserted in the magazine.

## Railway Officers

**BALTIMORE & OHIO.—R. P. Bartlett,** superintendent, Baltimore Terminal division, has been appointed superintendent of the car service department at Baltimore, succeeding **John Hewes, Jr.,** who retired May

C. E. Bertrand

1, after almost a half-century of B&O service. **C. E. Bertrand,** assistant superintendent of the B&O Chicago Terminal, has been named superintendent of the Baltimore Terminal division, succeeding Mr. Bartlett.

**CANADIAN NATIONAL. — C. E. Goodenough,** trainmaster, Toronto terminals, has been promoted to assistant superintendent at Lindsay, N.B., succeeding **N. T. Walton,** transferred. **A. W. Jackson,** trainmaster at Nakina, Ont., has been transferred to Brantford, Ont., to succeed **G. W. Ellison,** who replaces Mr. Goodenough.

**Fay N. McKenzie,** passenger traffic manager at Montreal, will be transferred to the Western region at Winnipeg June 1, succeeding **William G. Connolly,** who will retire on pension May 31.

**CENTRAL OF GEORGIA.—Mike Powell** has been appointed foreign freight traffic manager at New York. **W. Lawrence Durrett,** commercial agent at New York, has been appointed foreign freight agent there. **R. C. Hodges,** commercial agent at Albany, Ga., has been named general agent at Dallas, Tex. **W. C. Hurst, Sr.,** has been appointed general agent at Memphis, Tenn., and the position of commercial agent there, formerly held by Mr. Hurst, has been abolished.

**CHESAPEAKE & OHIO.—Robert A. Straub,** assistant general attorney, has been appointed general claims attorney, with headquarters remaining at Detroit. **John J. Holden,** attorney, has been named assistant general attorney at Detroit.

**J. B. Billison** has been appointed general agent at Philadelphia, succeeding **O. W. Harris,** who has retired after 41 years of service. **M. O. Benson** has been named general agent at Norfolk, Va., succeeding **F. H. Wilson,** retired. **Aubrey O'Herron,** freight traffic manager at New York, has been transferred to San Francisco, succeeding **C. J. Ploss,** who will replace Mr. O'Herron at New York.

**NORTHERN PACIFIC. — C. H. Burgess,** general manager at St. Paul, has been appointed vice-president, operation and maintenance, at that point, succeeding **W. W. Judson,** who will retire May 1 because of ill health. Mr. Burgess joined the NP in 1916 as a track laborer after receiving a civil

C. H. Burgess

engineering degree at Worcester Polytechnic Institute. Subsequently, he progressed through engineering and operating positions until he was named division superintendent in 1942. He was advanced to assistant general manager at Seattle in 1947 and in 1950 became general manager.

**E. S. Ulyatt,** assistant general superintendent transportation at St. Paul, has been appointed general superintendent transportation, succeeding **R. E. Mattson,** deceased. **H. O. Whitten,** assistant division superintendent at Billings, Mont., has been named assistant general superintendent.

**James T. Derrig,** assistant chief engineer at Seattle, retired May 1 and has been succeeded by **John E. Hoving,** assistant to chief engineer at Pasco, Wash. **A. J. Hendry,** assistant signal engineer at Livingston, Mont., has been named signal engineer at St. Paul, replacing **Stanley W. Law,** who also has retired.

### OBITUARY

**Donald Y. Geddes,** 68, who retired in March 1949 as assistant to general manager of the New York zone of the **Pennsylvania,** died at St. Petersburg, Fla., May 3.

**A. W. Huggard,** general eastern freight agent of the **Norfolk & Western** at New York, died recently.

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# The Santa Fe's Attack On the "Union Shop"

Of all the myriad of American institutions which might with propriety have undertaken the important public service of challenging in the courts the mandatory "union shop," it remained for a great railroad—the Santa Fe—actually to take upon itself this arduous civic duty. Recognizing the profound national significance of the railroad's action, the Academy of Political Science recently asked President Fred G. Gurley to outline his attitude toward the case—which he did in an address to the academy on April 21.

Railroad managements opposed the repeal of the provision in the Railway Labor Act which outlawed the "union shop." Most of them put up some resistance against the signing of "union shop" agreements, after the law had been changed to legalize them. However, since the repeal legislation had been enacted by a large majority of Congress, really stubborn resistance to the innovation seemed futile to most railroad managers; and, accordingly, many union shop agreements have been acquiesced in by the railroads. At Amarillo, Tex., however—where 13 Santa Fe employees were seeking an injunction in the state court against both the unions and the railroad, to forbid their signing a union-shop contract—the railroad came forward to ally itself with its protesting employees; and exerted itself with sufficient legal skill and expert testimony to secure a permanent injunction from the local court against the signing of such an agreement. Furthermore, the court has forbidden the unions to demand such a contract, or to invoke sanctions (e.g., a strike) for this purpose.

Mr. Gurley made it quite clear in his address that the Santa Fe is not opposed to unions. "We have recognized railroad unions beginning in the 1880's, and we think they have a useful and legitimate place among American institutions," he said. He characterized the railway unions as "among the very best of labor organizations in the country." He also recognized the natural inclination of dues-paying union members to resent the "free rider." But none of these considerations appealed to him as strong enough to offset the controlling objection that the union shop would require a citizen to join and pay dues to a private organization, as a condition of obtaining or retaining employment.

He drew attention to the "inalienable rights" as set forth in the Declaration of Independence, and the provisions of the Bill of Rights amendments to the Constitution, providing that no person may be deprived of life, liberty or property without due process of law. "Time and again," he said, "the Supreme Court of the United States has said that these rights and these liberties include the right to engage in any of the common occupations of life without the imposition of unreasonable or burdensome restrictions." He then asked his learned audience to consider whether the inalienable rights of a railroad employee were being preserved in the following actual situation:

"One of the witnesses who testified at Amarillo was a young man who had been discharged by another railroad. This young man had been a member of the appropriate labor organization. The time came when unfortunately both his wife and his child became ill. He encountered unusual expenses which caused him to be in debt and he became delinquent in his dues to the labor organization. When he became delinquent in his dues he was no longer in good standing and, under the agreement between the labor organization and the railroad in question, he was discharged. Of course this did not help him pay his debts nor did it help him or his family in the pursuit of happiness."

All the evidence points to the conclusion that the unions do not need the union shop in order to prosper. It puts authority in the hands of union leaders at the expense of their members—who have hitherto enjoyed the right to veto high-handed action of their officers by stopping their payment of dues. That power is denied them under the union shop. The railway union leaders have, on the average, not been tyrannical in their treatment of their members—and for the very good reason that, heretofore, they have not had the power to be so. But sad experience shows that excessive power, when granted, seldom fails to be exercised.

This is not a railway industry fight, but one involving the future welfare of the whole American people. Mr. Gurley's discussion of the issues has been temperate and factual, and, while determined, has been tolerant of contrary opinion. Let's hope that the discussion can be kept upon that high plane and that the issue will be fully presented and understood, not only by the courts but by all Americans, as the issue moves on to final adjudication.

# Questions and Answers FOR THE TRANSPORTATION DEPARTMENT

**Under provisions of demurrage Rule 1, Section B,4-a, just what refrigerator cars bearing evidence of lease painted or stencilled on them can be considered not subject to demurrage rules?**

### *Some reefers not subject to demurrage.*

The only refrigerator cars on which a lease can be considered the equivalent of ownership, and hence not subject to demurrage rules, are those used for fresh meat and packing house products, as provided in Rule 36 of the perishable protective tarrif. This rule, in conjuction with Note 1 thereto, sometimes has been erroneously interpreted to mean that all refrigerator cars under lease to a consignee, if marked with the name of the consignee, are exempt from demurrage while standing on a track owned or leased by the lessee of the cars.—*Eastern Assn. of Car Service Officers.*

**Who is responsible for car weighing?**

### *Short lines, under some conditions, are not.*

A road-haul carrier, less than 100 miles in length, originates loads, and, because it has no scale, delivers them to connections unweighed. Connecting lines bill the originating carrier for weighing cars, giving AAR Car Service Rule 15 as authority for so doing. Is this proper?

No. A railroad less than 100 miles long, and without scale facilities, is not responsible for such weighing. (Car Service Rule 15-C)—*E.A.C.S.O.*

• • •

### *Sorry if we gave a wrong impression.*

It has been called to our attention that, in the last column (April 26, page 16), in giving answers to the demurrage quiz, we may unintentionally have given a wrong impression in regard to requirements for notices of arrival and constructive placement.

The problem in Question 1 of the quiz centered around notice of arrival. Consignee had told the railroad's agent verbally that telephone notice of arrival was satisfactory, but had not confirmed the conversation in writing. When demurrage did accrue on some cars, the patron finally paid the bill under protest and took his case to the Interstate Commerce Commission, which sustained his protest and directed the railroad to refund the charges. In explaining why the ICC sustained the protest we said: "Smith had not been given a notice of arrival, or of constructive placement, in writing, as required by tarrif. Patron had not confirmed by letter that telephone notice was sufficient."

Several readers pointed out that some persons may have assumed from our answer that notice of constructive placement may be given orally if the patron agrees in writing to accept such notice. We did not intend to give such an impression, *for the fact is that constructive placement notices always must be given in writing.*

Notice of constructive placement does constitute notice of arrival. That is what we had in mind when we wrote the answer quoted above. However, either we should have omitted mention of it, or our explanation should have been made clearer.

We don't like to give wrong impressions or make out-and-out errors. But should we do so, we are glad to have our readers catch us up.—*G.C.R.*

• • •

### *A chance to make $5.*

We promised to give in the May 24 issue answers to the quiz which appeared on this page in the April 12 issue. Instead we will print them in the issue of June 7. The problem to be worked out in the quiz was one of matching cars having certain mechanical defects with ladings subject to damage by some of these defects. The objective, of course, was to pick a car which would be likely, if properly handled in yards and in road trains, to give the lading a damage-free ride to destination. Quite a number of answers have come in, but we'd like to see more, for this is a very important subject. There is still plenty of time to get your answer in.

A number of railroads, incidentally, are using this quiz as an educational piece. They have suggested to certain classes of employees that they answer the quiz.

This loss and damage prevention quiz was the fourth quiz we've run in this column. Two of the preceding quizzes were on the general subject of car service rules, and the third dealt with demurrage. While we have no intention of making this entirely a quiz column, we do plan to run other such pieces from time to time on a number of different subjects. If the quizzes are practical and realistic they may be of some value as a training device for many classes of employees. Therefore, we would appreciate receiving from any reader suggestions for future quizzes. We will pay $5 for each suggestion received and adopted, *provided* the suggestion is detailed enough so we can be sure of what you are driving at.—*G.C.R.*

CONDUCTED BY G. C. RANDALL, district manager, Car Service Division (ret.), Association of American Railroads, this column runs in alternate weekly issues of this paper, and is devoted to authoritative answers to questions on transportation department matters. Questions on subjects concerning other departments will not be considered, unless they have a direct bearing on transportation functions. Readers are invited to submit questions, and, when so inclined, letters agreeing or disagreeing with our answers. Communications should be addressed to Question and Answer Editor, *Railway Age*, 30 Church Street, New York 7, New York

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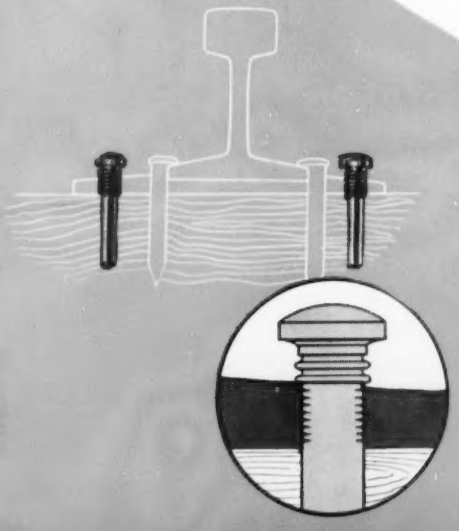

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When is
really
5th
YEAR
6th
YEAR
8th
YEAR

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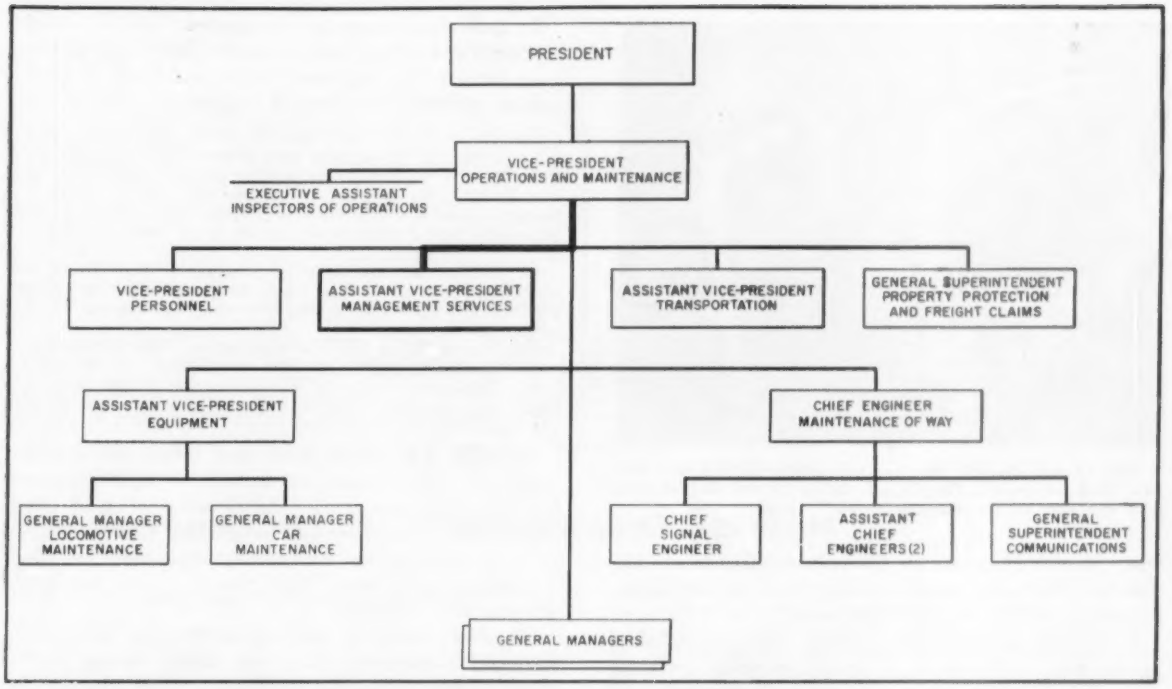



**NEW ORGANIZATION for the Operations & Maintenance headquarters organization is streamlined so as to work directly with the field organization in each of the six districts of the New York Central System. Its two outstanding accomplishments are (1) elimination of two levels of management, and (2) better staff work.**

## NEW NYC ORGANIZATION PROVIDES . . .

# New Operating Staff Tools

### Complete recasting of operations and maintenance organization ends "layering"; introduces new concept of staff assistance; "gets all bases covered"

A complete reorganization of its operations and maintenance department—which employs 90 per cent of the road's approximately 100 thousand employees—is in the final stages of accomplishment by the New York Central, second largest railroad in the country in revenues and in assets. Based on a "blueprint for better teamwork" which was put into initial effect late in May 1953, the new plan of reorganization seeks to accomplish these major goals:

**1.** End "top-heaviness" at the summit of the organizational structure, and close the "gap" between the presidency and junior officers.

**2.** Eliminate "whole levels of management," to reduce "layering."

**3.** "To provide better staff work for higher officers—to relieve them of as much detail as possible and give them opportunity to think; and to give them time to work more closely in association with their subordinates and to engage in long-term planning, as against dealing only with day-to-day jobs and 'putting out fires'."

*—President William White*

The effect of the new set-up for operations and maintenance is to provide a combination of departmental and regional patterns of command responsibility. The Central is one of the few roads in the country which had adhered traditionally to a so-called "departmental" mode of organization. Thus, unlike most lines, the road formerly gave its district or division operating officers no jurisdiction over maintenance-of-way or of equipment; they were, in effect, "transportation" officers only. The six district general managers were out of the channel of command in matters relating to maintenance of way and rolling stock. Furthermore, they reported to the vice-president—operations & maintenance, through an intermediate layer of vice-presidents for Lines East and Lines West, respectively. And the O&M vice-president himself went through another layer—an executive vice-president. Each of these "levels" was staffed completely with departmental officers and assistants.

The new O&M headquarters organization chart (shown above) outlines the "streamlined" chain of command and staff assistance. It is designed to work directly with a field organization in each of the six districts for which a new " blueprint" of organization has been prepared and installed. As the road's president put it recently,

**A FRUIT OF STAFF WORK ON THE CENTRAL—The new book of symbol freight schedules (right) is less than half the size of the former "bible" (left).**

"Our general managers on the various districts are the Number One man, just as on our divisions our superintendents are the Number One man."

A number of important changes are accomplished by the new headquarters blueprint, including revisions of responsibility for equipment and for maintenance of roadway to conform more closely with general railroad practice about the country. The most significant revisions are that:

(1) General managers report direct to a single executive (the O&M vice-president) instead of through two other levels of management.

(2) Two new staff organizations are created under assistant vice presidents—one for "Management Services" and one for "Transportation."

(3) Responsibility for inventory control and stores management has been separated from the functions of the vice-president—purchasing.

Revision (2) puts into effect the determination of the central's management to see that "all bases are covered" and that staff officers re so organized as to give maximum assistance to the "line" organization. Revision (3)—a wholly unorthodox arrangement among railroads—carries out the principle that responsibility and authority must go hand in hand. Giving O&M responsibility for inventory and stores simply recognizes that the department charged with the cost of inventory has the most incentive to keep it at a minimum. "Hoarding" is the result of having two bosses—he who pays and he who keeps.

### *How It's Being Accomplished*

When William White became president of the Central on August 1, 1952, he gave high priority to perfecting its organization structure. The knottiest problems were in the O&M department. The usefulness of outside assistance was obvious. In finding it, lack of important direct experience with railroading was a virtue. "We are sometimes accused of being introverts in the railroad business," declared the president in a recent talk, "and I wanted someone who had no preconceived ideas about what our organization structure should be. We wanted fresh minds to new eyes."

To meet these needs the management firm of Cresap, McCormick & Paget was engaged. They had done a good job for Westinghouse Electric and Ford. The consultants followed four lines of inquiry:

(1) *Use of the "free interview" to obtain the views of 428 officers of the road representing every phase of O&M activity.* Five trained interviewers kept all matters in strict confidence and used replies only to build up general observations about the changes in organization needed. In general, their approach to each interviewer was: "What would you do if you were running the New York Central?"

(2) *Study of the work habits of principal supervisors, with the close cooperation of the incumbents themselves.* Many supervisors kept detailed diaries for a period of one or two weeks for the purpose of the study.

(3) *Observation of forces at work all over the system.* Every major installation and its operation was examined in the survey.

(4) *Comparative studies of the organization of other large railroads and industrial concerns* with the same problem of geographical dispersion of working forces as the New York Central.

Findings of the management firm, among many others, were that NYC employees worked at 3,100 separate locations over the nearly 11,000 miles of road; that most officers complained of insufficient staff assistance or staff organizations ineffectively organized; and that a common belief was, "You have to go to top headquarters for everything."

The new concept of staff organization for O&M headquarters is embodied in a new office (shown in the chart on page 19)—"Management Services," headed by an assistant vice-president. With a few exceptions where staff functions and line responsibility are combined, this office is organized wholly to assist line officers at system headquarters and in the major districts. In each district, the "blueprint" organization calls for a small management service staff reporting to the general manager.

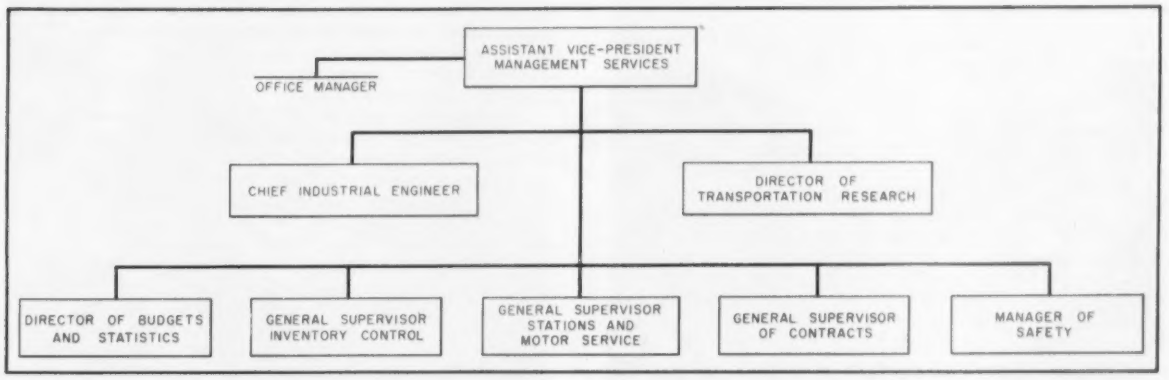
As is evident from its organization chart, (page 21). "Management Services" gets into every phase of O&M's jurisdiction. The chief distinction between it and the office of assistant vice-president—transportation is that the former deals with operations management planning for "the long pull," while the latter serves "as a coordinating point with respect to day-to-day distribution and use of equipment, policing of delays and failures and provision of current transportation information to shippers."

V. L. Nelson, assistant vice-president in charge of management services, and his seven principal team members are "primarily planners," according to the organization "blueprint," with the job of "analyzing results, looking ahead, finding new and better ways of improving service and reducing costs." This assignment is premised on the finding that "a big business like ours cannot be run efficiently if all of our executives are absorbed in day-to-day operations."

A civil engineer by profession, the assistant vice-president—management services, has close to 44 years' service with the Central behind him, mostly in engineering construction and valuation. In 1932 he "crossed the line" into the accounting department, ending up as assistant comptroller—disbursement accounting, for the system. He sums up his attitude toward his new kind of staff responsibility: "Nobody around here is an expert. We're paid to help operating officers find answers. Our job is to supply "locomotion and method."

**HOW IT WORKS** ▶

NYC'S OPERATING STAFF TOOLS . . .




**"Management Services" is the operations management planning staff "for the long pull." Its staff are "primarily planners."**

# The Seven Units of "Management Services"

## These are their functions and objectives . . .

**Industrial Engineering**—Headed by a chief industrial engineer, who came from General Motors, this department includes a small engineering staff with counterparts in the Maintenance of Equipment and Maintenance of Way Departments.

The jobs of the unit comprise assistance, counsel and technical supervision to all officers of the O&M department. "Industrial engineering" is defined as "the conduct of studies and preparation of plans of organization, methods and operating procedures for better operating performance"—bringing to the railroad the basic principles and methods that have been proven successful in many other industries.

The Central takes pains to point out that an industrial engineer "is definitely not an efficiency expert of the old school." The staff of the new unit works *with* the people who are responsible for costs and performance. Everybody "gets in" on any new plan which may come out of an industrial engineering study and the responsible officers give it a favorable nod before it is passed to the O&M vice-president for approval and implementation down through the *line* organization of the road.

The industrial engineering staff does not take credit for any ideas, and its major preoccupation is to obtain good working relations with the forces on the road which have to carry out the plans. The function of the industrial engineer is to guide study groups with proven principles of analysis and a scientific methods of finding standards of performance.

### *A Typical Project*

Project No. 9 is typical of the unit's working mechanics. This a study of l-c-l freight-handling at Detroit—a particularly high cost point—now underway. Before it was initiated there was appointed an "advisory committee' of three line officers of the Michigan Central District, plus the chief industrial engineer—system.

To do the actual analysis work there was appointed, by the advisory committee, a "working committee" comprising the assistant superintendent, Detroit Division, and the freight agent of the terminal involved, together with an industrial engineer assigned by the headquarters unit. This committee carries out the job of observing work habits, gathering and analyzing data, considering mechanical aids and rendering a report on future plans for improvement.

The advisory committee checks on progress of the study group; steers it from time to time; and gives final field approval to its report. In addition to the industrial engineer, one member of the working committee has been relieved of his routine responsibilities for about four months, to work full time on gathering and intercepting facts relating to the work of the committee.

Also in active progress by Industrial Engineering is a major systemwide study of mail and baggage handling. Contemplated projects include studies of yard operations (with a probable "pilot" experiment in a smaller yard); office methods and procedures; and operations in general shops and district diesel repair shops.

**Transportation Research**—Headed by a director with long and varied background with the Central, this staff unit of "Management Services" uses four experienced railroad operating men to provide assistance to all departments through planning, analysis, special studies and research on transportation methods, performance and costs. Included are analyses of major A. F. E. projects "for operating and economic implications." An important job is to develop and study facts as a basis for managerial decisions on such subjects as schedule changes, suburban service and equipment, joint facilities, and terminal operations. Another big task is to help management "identify and solve present or impending competitive problems." This includes collaboration with the freight traffic department.

Among specialized subjects coming under purview of this unit are the economics of freight equipment and special device cars; per diem and mileage charges; labor-saving facilities for operating installations; substitute truck services; and pooling of schedules and equipment. This unit is also available to provide testimony in cases before regulatory bodies.

"Transportation Research" now has before it about 40 possible projects—some of which will be carried on jointly with the chief industrial engineer and the general supervisor of stations and motor service. Particularly "hot" topics of investigation are:

- Mechanized car reporting and accounting system.
- Economics and competitive aspects of trailer-on-flat-car services.
- Economic and competitive justification for faster freight schedules.
- Adequacy of existing freight-train equipment.
  - (a) Owning vs. renting of specialized equipment.
  - (b) Relative economy of rebuilding vs. scrapping and purchasing of new cars.
- Trucking in lieu of lighterage at ports.
- Development of the "break-even" point in car utilization.
- Optimum train lengths—Where is the balance between operating economics and competitive requirements?
- Modernization of yards and terminals.
- Effect of increased volume on operating expenses and profits.

- Long-range revenue forecasting, i.e. market research.
- Cost of handling individual commodities—so traffic solicitation can be "angled."

An important accomplishment of this unit since its establishment last year has been a freight traffic flow study, which, by use largely of regular routine reports, followed every car over the road between origin and destination r interchange points, through an entire week (with carryover through to destination over the second week). A special group was stationed at the machine accounting office at Buffalo to make the mechanized punched card study. With the findings in hand, freight schedules of the system were recast in their entirety effective January 15, 1954, with the following results, according to O&M Vice-President Karl Borntrager: (1) better service to shippers; (2) a 24 per cent decrease in schedule commitments; and (3) a halving in the size of the former book of symbol freight train schedules.

Usefulness of the flow study continues as new ways are found to rearrange and reassess the data available from it. It is currently being used, for example, to bring hitherto unavailable light on such widely varying problems as car distribution; car utilization; actual—rather than scheduled—transit time; and short hauling.

**Budgets and Statistics**—This unit and its director have the primary task of overseeing the planning and administration of the O&M budget and of compiling *current* operating statistics. Effective January 1, 1954, the Central's O&M department put into effect a new budgetary procedure to (1) simplify methods of forecasting revenues and expenses; (2) establish and identify responsibility with authority; and (3) provide effective control of payroll expenditures at all levels, from individual work locations up through division officers to system headquarters.

The budget is on both an annual and a monthly basis, with daily controls provided. But particular emphasis is laid on the necessity to smooth out fluctuations as much as possible to avoid expensive changes in commitments for men and materials. Thus, every attempt is made to plan roadway maintenance on an annual basis, so that track machinery and trained men can be utilized with maximum effectiveness over the whole period.

The new budget replaces one based on ICC accounting classifications. In brief, the railroad believes that the latter is not realistic, because the account categories in many instances charge money outlays against officers who do not control the expenditures. Thus, for example, under ICC accounts, the cost of car inspectors is charged to transportation expense, although the actual payroll control is in the hands of mechanical officers.

Salient features of the budget are these:

- Assignment of authority and responsibility conforms to department organization.
- Control of payrolls expenditures in the field is on the basis of work performed.
- Continual development and improvement of standards of performance help measure efficiency at various levels of business volume.
- The budget is used as a training medium for up-grading executives.
- The participation of line officers and their staffs in development of procedures and standards engages their interest, stimulates thought and provides a channel of communication through which their ideas for improvement in methods and procedures can gain due recognition.

The Central's formal description of its new control system runs: "The budget shall be on a departmental basis, under which each department head shall be responsible for the expenses for forces under his jurisdiction—regardless of the group of accounts to which the expenses are distributed." As for the overall policy of the budget, it can best be summed up: "Give an officer enough money to do the job you expect him to do; hold him responsible under accepted standards of performance."

**Inventory Control:** Probably unprecedented in the railroad business is the action taken by the Central in transferring responsibility for stores and inventory control of materials from Purchasing to O&M.

*Line* responsibility for stores organization and inventory control now lies in the hands of the departmental senior executives whose forces in the field use these stores. *Staff* responsibility is vested in the general supervisor of inventory control, working with his counterparts on the staffs of chief engineer—maintenance-of-way, and assistant vice-president—equipment.

Staff functions include: (1) Development and installation of standard system-wide plans and procedures for efficient control of stores stock; (2) supervision of stores and inventory control functions; and (3) determination of practices for redistribution of surplus materials.

In addition to staff functions, the office of general supervisor of inventory control (1) exercises line operating supervision of the road's General Scrap & Reclamation Plant at Ashtabula, Ohio, and of the General Stationery Stores at Collinwood; (2) directs scrap drives and clean-up campaigns; and (3) inspects inventory control practices for all materials—including rails and crossties—and reports to using department on matters requiring correction.

The chief purpose in the transfer of stores jurisdiction to O&M is, as in the budgetary control system, to assign responsibility with authority. If the using forces are charged with the cost of excessive or obsolete inventories or wasteful costs of distribution, they are more inclined to find cheaper and better ways and means, according to the Central. Under orthodox procedure, the department which is charged with stores expense is under constant pressure by its using forces to overstock or hoard—"just in case." Hoarding in turn, leads to a psychological climate of free consumption.

**Stations & Motor Service:** Under the direction of a general supervisor, this unit is, fundamentally, "staff." With regard to stations and trucking operations proper its duties include:

(1) Analysis of procedures, facilities, layout, manpower utilization, equipment, contract services, freight house and office performance, and other elements.

(2) Development of standard policies and programs with respect to stations and motor service operations throughout the system. This includes terminal P&D services and station-to-station substitute truck services.

(3) Interdistrict and interline coordination of l-c-l loading schedules and preparation and issuance of loading orders for entire system.

(4) Advice and assistance to district supervisors of stations and motor service in developing, negotiating and administering contracts; liaison with freight traffic department; auditing of services contracted.

(5) Specifications for and analysis of freight station operations reports; consolidation of same and preparation of reports.

(6) Important functions in matters pertaining to demurrage.

**General Supervisor of Contracts**—This unit is wholly "staff," providing systemwide assistance in the negotiation, analysis and administration of joint facility and other contracts. Its assistance to the districts, which have direct authority, includes auditing the performance of outside participants in the agreements. It has no connection with employee agreements or with contracts for motor service.

**Manager of Safety**—Wholly staff in character also, this unit has the following functions: (1) formulation of safety policy and practice; (2) development, supervision and encouragement of a safety program on the railroad; (3) preparation and analysis of safety records and data, conduct of safety research and training; and (4) liaison with and stimulation of line executives on safety practices.

Provision of essential staff functions in a separate office of "Management Services" is the most effective way of determining "how to do more with less," according to Vice-President Borntrager. He asserts that "tomorrow's record will prove that cooperative research of this type pays off." It all backs up what President White said at his first annual system staff meeting in October 1952: "We cannot tolerate mediocrity—we will not condone failure."

**CUT SLOPES** are shaped, first by working from the bottom, then by taking the upper portion.

**ROADWAY SHOULDERS** are strengthened and roadways built for off-track equipment.

**INTERCEPTING DITCHES** are constructed and maintained by the machines using ditch-digging buckets.

**SIDE DITCHES** are formed and regularly maintained on the ACL by the mobile units.

# How the ACL Uses Gradalls

**In addition to ditching, roadway construction and bank restoration, these machines do work that releases manpower for other operations**

Several years ago the Atlantic Coast Line purchased its first Gradall earthmoving machine for cleaning ditches, restoring embankments and constructing roadways along its right of way for the use of off-track equipment. Demand for this machine led the road to purchase additional units which were assigned to the territories of the general roadmasters.

At first these machines were used for the same work as the first one, but from time to time they were employed in other applications, permitting manpower to be released for other maintenance operations. The various applications became known from division to division with the result that, although the ACL now possesses 15 of these machines, there is rarely a time when

**EXCESS BALLAST left on the track after a track-raising job is picked up and distributed on the ballast shoulders.**

**TRACK LINING is not a normal operation for these machines but they are often used for this purpose.**

**THIS HIGHWAY CROSSING, with its approaches, has been entirely rebuilt with the aid of a Gradall.**

**YARD CLEANING is frequently carried out on the ACL with the machines mounted on a work train in this manner.**

they are not busy and when work isn't being planned ahead for them.

In connection with an extensive program underway for a number of years to strengthen roadbed and improve drainage over the entire main line, the Gradalls were employed for completing grading work where the contractor's heavy earthmoving equipment could not work efficiently, as around signal bridges and relay houses and under highway bridges. In some instances it was necessary to relocate telephone and signal pole lines to permit grading operations, and the machines were used to expedite this work.

These machines are also used for building up highway approaches as well as for improving grade crossings. In the latter work, the Gradall is used to pull disconnected rail back from the crossing area, remove the fouled ballast, backfill with fresh ballast, and, after the ties are replaced, pull the rail back into its position.

Another application is in track raising, where the railroad uses the machine after the track is tamped for removing excess stone ballast from between the rails and the intertrack area and applying it for equalizing the ballast shoulders. According to one general roadmaster, this work proceeds at the rate of 200 track-feet an hour, and releases the equivalent of 10 trackmen for other work.

The ACL also uses these units for out-of-face laying of 132-lb rail, and even for lining track. In the latter operation the machine moves along the embankment shoulder to the place indicated by the lining foreman. By placing the bucket against the far rail, the track is pulled or pushed as may be desired by the track lining foreman.

In terminals, these machines frequently are employed

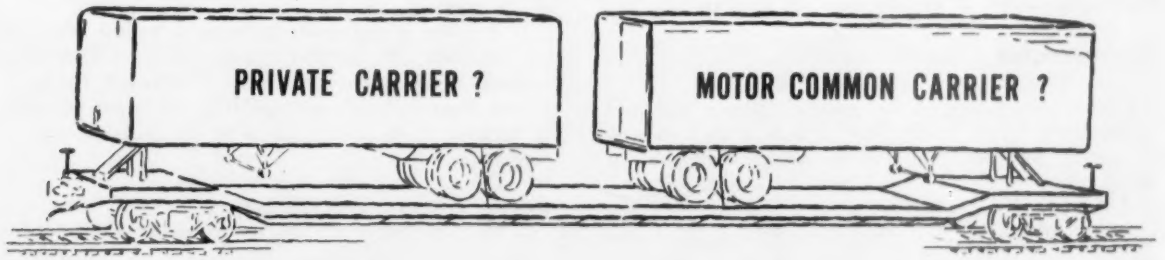
as cranes for loading rails, frogs, switches and crossings into gondola cars, and for unloading them. Also, they are often used for loading dirt and debris into open-top cars, for cleaning snow from station platforms, and for trenching for pipe lines.

Yard cleaning is another application. For this operation two Gradalls are used with a work train, each being lashed to the deck of a flat car. With a gondola car inserted between them, the machines scrape up the dirt and car droppings from adjoining tracks and load the material into the gondola car.

Each machine is manned on the ACL by an operator and two helpers. From his cab the operator maneuvers the boom and the bucket. One of the helpers runs the truck from the driver's cab, and moves the machine backward or forward at the direction of the operator who communicates with him by bell signals. The other helper stands on the ground, warns of approaching trains, cleans the bucket and wheels of mud, when necessary, and otherwise makes himself useful.

These crews are housed in camp cars which are moved about the railroad in trains to conform with the movements of the Gradalls over the highways to new work locations. A bunk car and a tool car are assigned to each crew. The tool car contains supplies and various boom attachments for the machine, as well as tools ordinarily used for maintenance of the unit. The operators are responsible for ordinary maintenance. They work under the direction of a general roadmaster.

The ACL is well satisfied with the usefulness and performance of this equipment. One general roadmaster stated that he regarded this unit as one of his most useful maintenance machines, and that he had not yet learned all of the applications in which it can be used.




# Who Shall Be "Piggyback'd"?

**By EUGENE F. RYAN**
President, Rail-Trailer Company

*[Two names closely linked with the postwar development of the trailers-on-flat-cars idea are those of Eugene F. Ryan and his organization, the Rail-Trailer Company. Basically, Mr. Ryan seeks to act as a coordinator, or middleman, between railroads and motor common carriers.*

*In the following he sets forth his personal views on the question whether a railroad should (a) use "piggyback" only as a means of handling its own traffic, (b) use it to haul the motor common carrier, or (c) use it also to haul the private trucker. Because such questions are currently being looked into by the Interstate Commerce Commission, Mr. Ryan here limits his discussion to what he terms their "practical side."]*

I believe that there are strong economic and practical reasons for establishing trailer-on-flat-car service exclusively for motor common carriers.

Why?

I believe it is not economically sound for a railroad to offer the service to *all* shippers because:

- It would not attract to the railroad revenue now produced from the large and growing motor common carrier movement over the highway;
- It would tend to divert box-car traffic to trailers-on-flat-cars;
- It would establish a parallel conflicting rate structure alongside the present railroad rate structure; and

● It would, in effect, put anyone and everyone with a trailer into the transportation business, without proper regulation. (And it strikes me that we have enough people in the transportation business.)

In its 1953 Annual Report, the Interstate Commerce Commission warns of the dangers inherent in the growth of "unregulated" trucking. Specificially, the report draws attention to the buy-and-sell activities of so-called private truckers whereby commodities are ostensibly purchased from a manufacturer, transported, and sold to a consignee at a sufficiently higher price to cover the cost of transportation. As with trip-leasing, this practice is almost impossible of regulation—and its principal result is to divert freight from regulated common carriers.

Opening trailer-on-flat service promiscuously to anyone with a trailerload of freight to ship would, in my opinion, increase the opportunity to avoid regulation by this "buy-and-sell" method, since it would encourage more people to go into unregulated private trucking. There would seem to be as much danger in this as in trip-leasing which is equally unsound economically.

### *Tax Perversion*

I have been informed that only about one trip-lease owner-driver in ten hauling steel is able to earn enough to stay in business, maintain his vehicle and show a profit.

A friend of mine in the meat-packing business has told me that, in many instances, the profit on meat comes entirely from the savings the packer effects by performing his own transportation. If this is true, (and my wife, for one, would be hard to convince), it would appear that the meat packer ought to get out of the meat business and go into the transportation business. Railroads are prohibited from going into the meat packing business and transporting their own products by their own railroad to save distribution costs. Yet, meat packers are freely allowed to go into the transportation business, and earn their profit, not from the sale of meat, but from the diversion of their traffic from common carriers to their own trucking company.

One basic difference in cost arises from the fact that the private carrier is not assessed the 3% federal tax on the transportation of his property. If the motor common carrier were able to apply that 3% tax to his gross revenues, he would have an operating ratio of 92.7% instead of 95.5%. His 1952 profits after income taxes would have increased 73%.

Rail-Trailer has made highway checks at key points in the Middlewest and has learned much about the characteristics of tractor-trailer movement. Basically, these differences appear between common and private carriage:

(1) Common carrier vehicles are 86% loaded—private carrier vehicles only 52%.

(2) Common carrier vehicles move 70% by night—private carrier vehicles only 50%.

(3) Common carrier vehicles average 16½ per company—private carrier vehicles only 1½.

Highway checks made by other agencies add one significant fact:

(4) Common carrier vehicle loads average 10% higher than private carrier loads—taking only loaded vehicles into consideration.

In practical application of these differences, I can cite two examples. A certain midwestern railroad is moving its own trailers-on-flats and has offered a service to shippers. Recently, the railroad was moving four lightly loaded trailers in each direction between Chicago and a smaller city some 225 miles distant. While the four trailers move by rail, the motor common carriers operating from Chicago to the same point move over the highway 34 heavily loaded trailers every day, which they could move by rail if the service were available at this location.

In another part of the country, a railroad now offers a trailer-on-flat service to its shippers between two major cities. I am told that in one direction they presently move 10 to 12 loaded trailers every night. The reverse movement is almost entirely empty trailers, which produce no revenue to the railroad. At the same time, highway checks reveal that over 450 common carrier trailers are moving daily on the highway between the same two points, each one of them potentially a customer of the railroad.

Is it sound economically to move 4 trailers when 34 are available from another source—or 12 trailers when upwards of 450 are moving over the highway? The basic reason these railroads are avoiding the larger potential is because of their reluctance to do business with a competitor.

### *Private Carriers a Different Case*

The amount of private carriage which takes place between a few key points is a relatively small part of all private carriage. Indeed, private carriage usually develops between points where service by common carriers is inadequate.

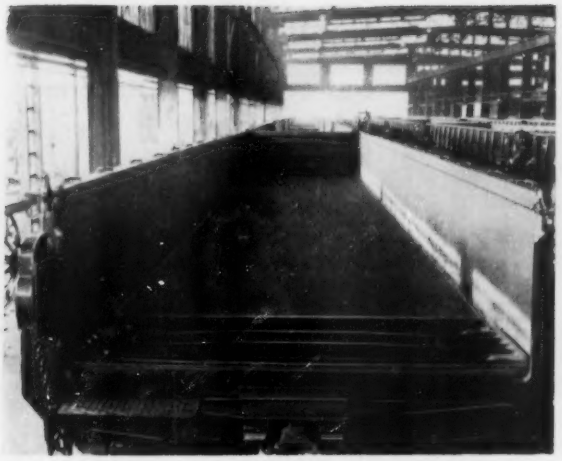
Another practical point that must be considered is the private carriers' method of operation. Common carriers maintain terminal facilities at both ends of the haul.

Thus city drivers are always available to deliver the trailers to the railroad at origin and to pick them up at destination. Private carriers, if they maintain terminal facilities at all, do so only at origin point. They would have to make other arrangements for the delivery of trailers at destination.

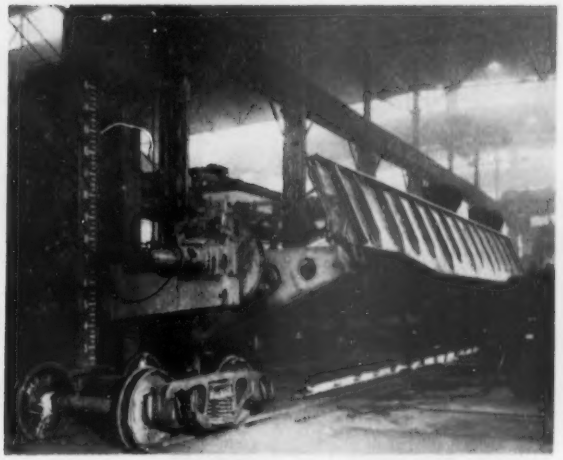
Have private carriers used trailer-on-flat service when it was available? Look at the Chicago Great Western. When trailer service was first offered, it was on published tariff basis. This tariff remained in effect for almost five years. So little traffic moved on it that it was finally cancelled, without opposition, in December 1940.

The New Haven still maintains a tariff for the movement of private shippers' trailers-on-flats. Of all the carriers who might use it, only one—Sears—has done so in any volume. And the total movement of private shippers' trailers is less than one-half of one per cent of all trailers moved by the New Haven.

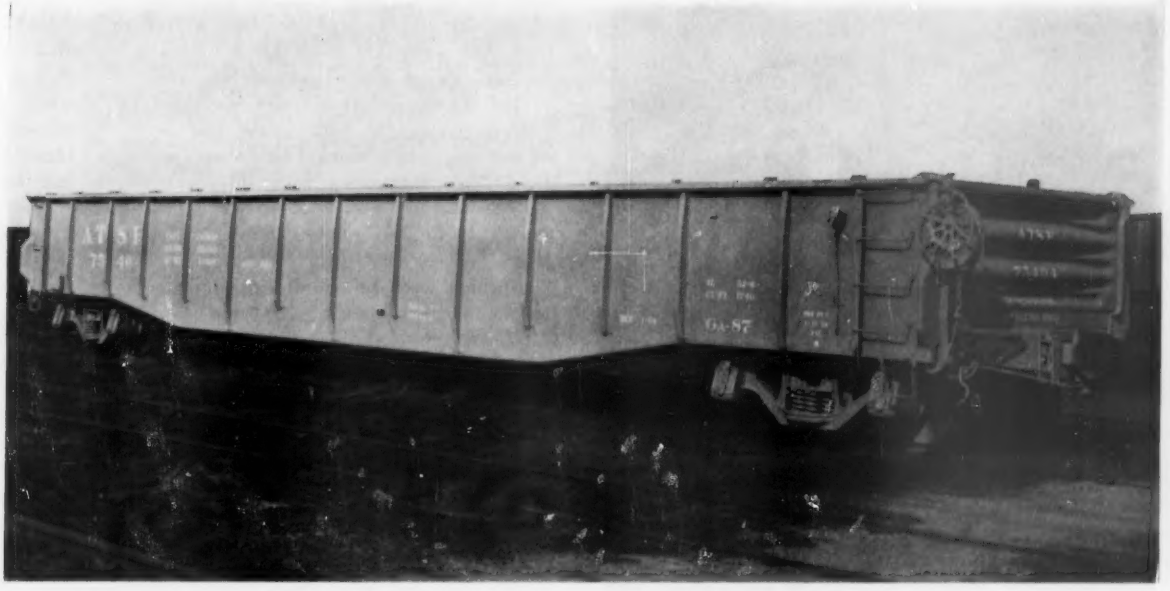
This all makes me wonder why the shipper organizations are up in arms about limiting "piggybacks" to motor common carriers. Is it a function of traffic management to set up and operate private trucking companies? Or is the primary responsibility of the traffic manager to make the best use of the regulated facilities of the great common carrier industries, both rail and highway?



Exceptionally smooth interior car sides are the result of the welded design.



Motor-driven welding positioner at Mt. Vernon shops is also used when removing and applying trucks.



# All-Welded Gondolas for Santa Fe

**Built at the Mt. Vernon shops of the Pressed Steel Car Company, 500 70-ton cars have improved drop-end design**

The Santa Fe has recently taken delivery of 500 70-ton drop-end gondolas, built by the Pressed Steel Car Company at its Mt. Vernon, Ill., plant. The cars are an improved all-welded design, intended to provide modern equipment, give better general service to shippers and reduce maintenance cost, as compared with old cars replaced.

The new cars are equipped with Dreadnaught steel ends, Wine drop-end door locks, Ajax power hand brakes, Type E high-tensile steel rotary-type couplers furnished by McConway Torley, and National M-17-A friction draft gears. Westinghouse Schedule AB-10 brake equipment is installed, also Royal Type-F brake regulators, Union coupler centering devices, Keystone lading anchors, Tranno metal brake steps, A-3 ride-control trucks, one-wear wrought-steel wheels and No. 18 Unit-type brake beams.

The car is an all-steel mill-type gondola with wood

**The welding positioner holds the car body in position required for down-hand welding on side sheets.**

**Welding the side-plate bulb angle and side-sill bottom angle to a side sheet with Oxweld DS-37 automatics.**

**Automatically welding the parallel edges of side stakes to side sheets with a Lincoln LAF-2 double-head machine.**

floor, drop ends and welded construction throughout except at a few places where rivets are preferable or required for the application of safety appliances or some other parts. The center sill consists of two AAR 12 7/8-in. 36.2-lb Z-sections; body bolsters, 3/8-in. diaphragms with 1/2-in. top and bottom cover plates; built-up bolster center filler; and drop-forged body center plates held in place by a combination of riveting and welding to give an added safety factor.

The body side bearings are bar-qulity steel with .15 to .30 silicon, heat-treated to 325-388 Brinell hardness for increased wear resistance. Crossbearers are 1/4-in. diaphragms with cover plates and crossties 1/4-in. steel pressings. Side sills are 6-in. by 4-in. by 1/2-in. angles extending the full length of the car and sills 7/16-in. plate angles with 1/4-in. pressed diaphragms extending from center sill to the 1/2-in. pressed corner posts.

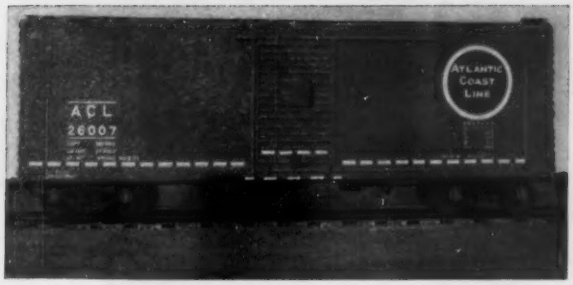
The side sheets, six per car, are 3/16-in. low-alloy high-tensile steel butt-welded together to give exceptionally smooth surfaces inside the car. The yellow-pine tongue-and-groove flooring boards, 2 1/4-in. thick with 5 1/16-in. face, are applied with a special key board at the center of the car and secured in place with floor clips and Grip Nut watertight bolts, all bolts being riveted over the nuts except where locknuts are used.

One illustration shows the operation of welding a 7/16-in. side-plate bulb angle and a 1/2-in. side-sill bottom angle to a blanket side sheet, using two Oxweld DS-37 full automatics with alinement wheels bearing against the top and bottom edges of the side sheet. The hose in the operator's left hand picks up excess flux by means of a vacuum. The funnel-shaped can holds flux which feeds by gravity down through the hose at the bottom, automatically covering up the molten weld. These two machines are shown using 5/32-in. wire and 550 amps at 30 volts, traveling 40 in. per min. and making 3/16-in. fillets.

Another illustration indicates the operation of automatically welded the two parallel edges of the side stakes, which are 5/16-in. thick, to the 3/16-in. side sheets. The fixtures for this operation were made by the Pressed Steel jig department and show a Lincoln LAF-2 full automatic operating with two heads with automatic flux feed and automatic pick-up of excess flux. The machine uses 600 to 625 amps at 32 volts, in this operation, with 5/32-in. wire traveling at 48 in. per min. making a 3/16-in. fillet simultaneously on each side of the stake. The machine automatically pulls itself at the proper speed laterally, and the entire gantry is operated lengthwise of the car side by means of a homemade hookup of an electric reamer motor.

## PRINCIPAL WEIGHTS AND DIMENSIONS
### OF SANTA FE 70-TON GONDOLAS

| | |
|---|---|
| Light weight of car, lb | 51,000 |
| Weight of one truck, lb | 8,250 |
| Cubic capacity, cu ft | 1,740 |
| Length inside, ft-in. | 52—6¾ |
| Width inside, ft-in. | 9—5½ |
| Height inside, ft-in. | 3—6⅛ |
| Length over strikers, ft-in. | 55—3½ |
| Width extreme (over hand brake wheel), ft-in. | 10—7 |
| Height, rail to top of side, ft-in. | 7—2⅛ |
| Height, rail to top of floor, ft-in. | 3—8 |
| Truck wheel base, ft-in. | 5—8 |



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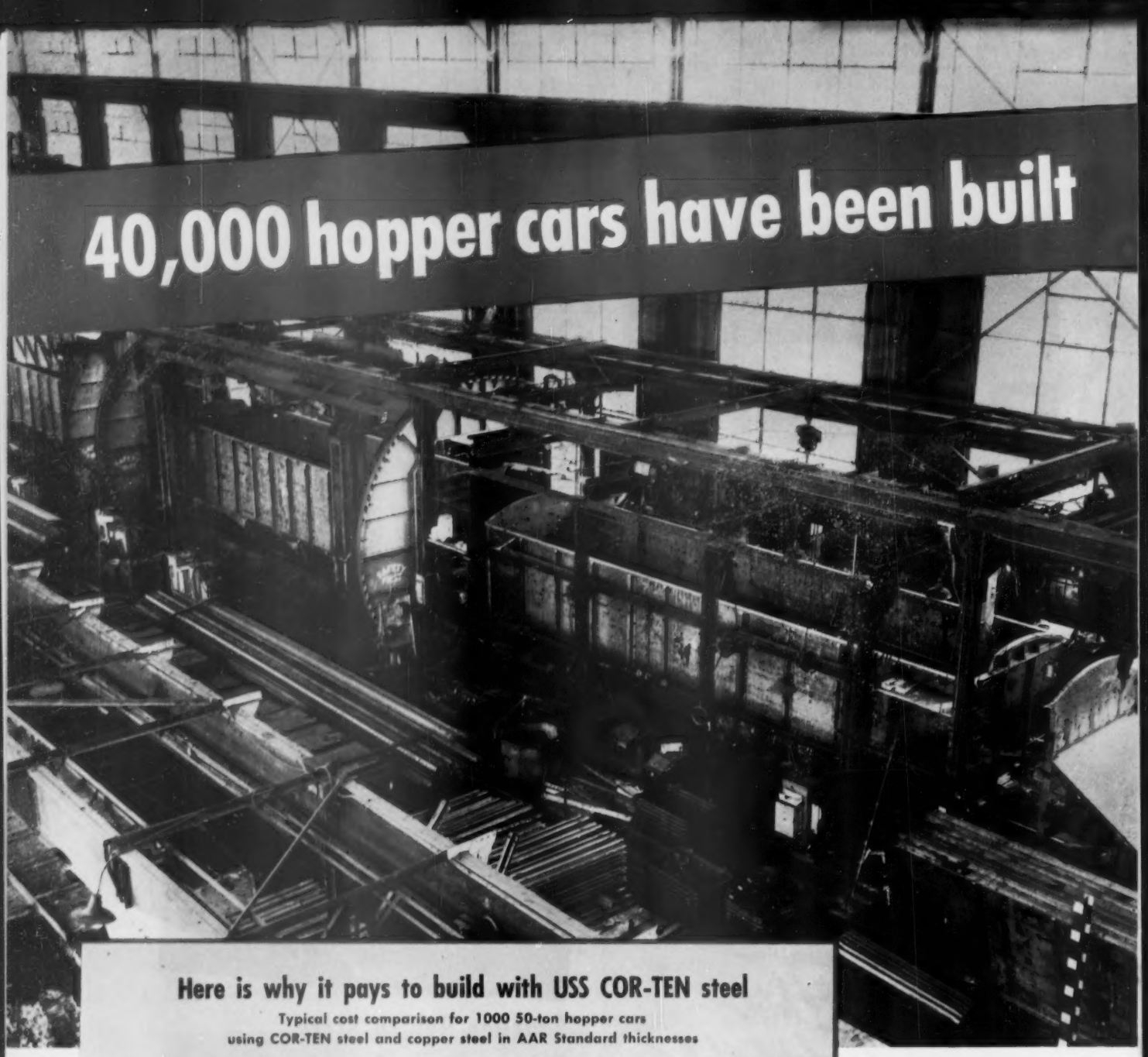
# 40,000 hopper cars have been built



## Here is why it pays to build with USS COR-TEN steel

**Typical cost comparison for 1000 50-ton hopper cars using COR-TEN steel and copper steel in AAR Standard thicknesses**

| CONSTRUCTION COST OF 1000 CARS | Cost of heavy repairs after 12 years at $1200 per car | Cost of heavy repairs after 18 years at $1370 per car | Cost of heavy repairs after 24 years at $1200 per car | Total cost of heavy repairs |
|---|---|---|---|---|
| Copper Steel at $5,000 per car $5,000,000 | $1,200,000 | ..... | $1,200,000 | $2,400,000 |
| COR-TEN steel at $5,170 per car $5,170,000 | ..... | $1,370,000 | ..... | $1,370,000 |

Additional cost of COR-TEN steel..$170,000
Per car...$ 170

| | |
|---|---|
| Total Repair Saving by COR-TEN steel | $1,030,000 |
| Additional cost of COR-TEN steel construction | $ 170,000 |
| Net Repair Saving by COR-TEN steel | $ 860,000 |
| Net Saving per car | $ 860 |
| Ratio of Net Saving to Additional Cost | 506% |

• Here being assembled are a few of the 5,500 70-ton hopper cars built by American Car & Foundry Co. for the Chesapeake & Ohio in 1950-51. High strength steel—mainly USS COR-TEN steel—was used for all body parts in contact with the lading.

**USS HIGH STRENGTH STEEL**

# better with USS COR-TEN steel since 1933

## COR-TEN steel construction pays for itself many times over

It costs about $170 more to build a 50-ton A.A.R. hopper car with body sheets of high strength, corrosion-resisting USS Cor-Ten steel of the same thickness as would be used in copper steel.

But this money is well spent—the use of Cor-Ten steel actually pays for itself many times over. First by saving the cost of one heavy repair and second by saving the time out of service such a repair involves.

### COR-TEN steel construction cuts heavy repair costs 42%

USS Cor-Ten steel construction in hopper cars will last at least 50% longer than copper steel of the same thickness. Thus during the 36 years' normal life of a hopper car, a copper steel car will require *two* heavy repairs—one at the end of 12 years and another after 24 years' service, each costing about $1200, or $2400 in all.

In contrast, a Cor-Ten steel car will require heavy repairs *only once*, at the end of 18 years at a cost of $1370. Subtract from this saving of $1030, the $170 extra cost of Cor-Ten steel construction and you have a net saving of $860—*more than five times* the extra first cost of Cor-Ten steel construction.

### COR-TEN steel construction cuts out-of-service time in half

These savings are further increased by the extra earning power that results from keeping cars serviceable—from having only one heavy repair in the life of the Cor-Ten steel car.

This can run into important money, for railroads tell us that many cars spend six months to a year, or even longer, waiting for enough cars to come in for repair to permit setting up a track for economical shop practice.

How many months do bad order cars lose on *your* railroad? With this figure in mind, consider the fact that the per diem that a freight car earns in only 71 days will pay the extra cost of applying Cor-Ten steel instead of copper steel in a 50-ton hopper car.

. . .

Now, ask yourself, does Cor-Ten steel construction justify its extra cost? We believe that your answer—like that of the present users of the 40 000 USS Cor-Ten steel hoppers—will be an emphatic, "Yes."

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2. The average empty car was actually moving over the road only 9% of the time, spent 91% of its time in yards.
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